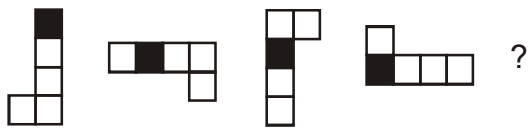


Directions (Q.1 to Q.5): Complete the following number / letter / figural series by choosing from the given choices.

1. $\frac{2}{3}, \frac{10}{19}, \frac{26}{51}, \frac{50}{99}, \frac{82}{163}, ?$
 (1) 104/173 (2) 112/183
 (3) 114/193 (4) 122/243
2. 2, 2, 5, 7, 11, 22, ?, ?
 (1) 23, 35 (2) 23, 67
 (3) 43, 77 (4) 63, 85
3. D G K P G J N S _ M _ V _ P T _
 (1) N Q U X (2) K N R W
 (3) J Q M Y (4) L O R U
4. Figural series



- (1) (2) (3) (4)

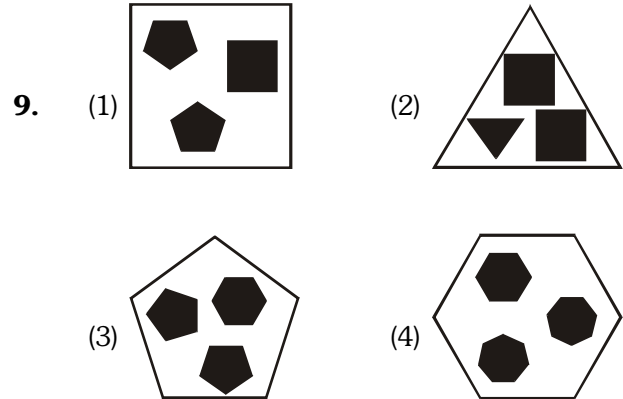
5. Figural series



- (1) (2) (3) (4)

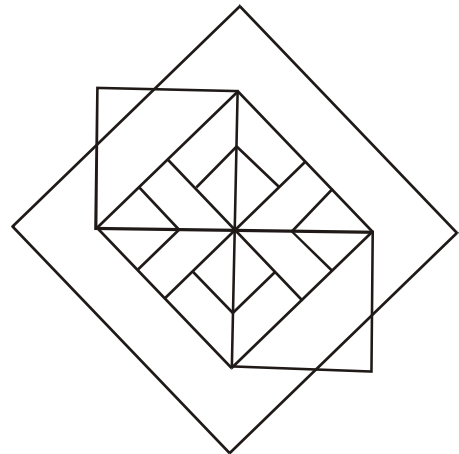
Directions (Q.6 to Q.9): In the given questions there are four groups of numbers / pairs of numbers / groups of letters / figures. Among them three are alike and one is different. Find the one which is different.

6. (1) 5 8 8 (2) 6 7 5 (3) 7 3 5 (4) 7 6 8
7. (1) 211, 41 (2) 338, 54
 (3) 507, 69 (4) 734, 76
8. (1) G S K P (2) D W M N
 (3) B Y E V (4) L O I R



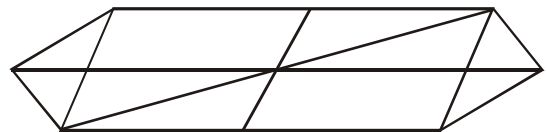
Directions (Q.10 to Q.12): Identify the number of specified geometric shapes in the given diagrams and mark the correct answer.

10. How many squares are there in the given figure ?



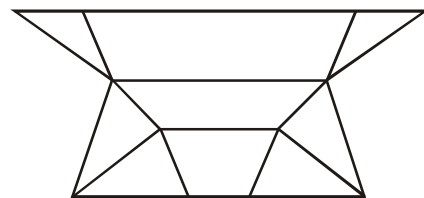
- (1) 13 (2) 12 (3) 11 (4) 10

11. How many Triangles are there in the given figure?



- (1) 8 (2) 10 (3) 12 (4) 14

12. How many Trapeziums are there in the given figure?

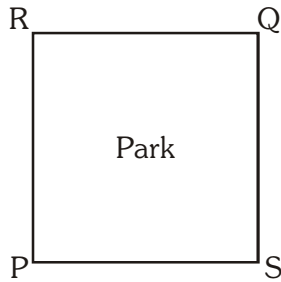


- (1) 7 (2) 9 (3) 10 (4) 12

13. If MATHS is coded as GGNNM, then BOTANY can be written as

- (1) VUNGHE (2) HUNGVE
 (3) VNUGGH (4) HHUVVG

Direction (Q.14 & Q.15) :



P, R, Q and S are standing in the corners of a square shaped park with length L mts. as shown in the figure.

P and Q walk $\frac{1}{2}$ L mts. in clockwise direction, while R

walks 2 L mts. in anti clockwise direction. S remains in the same corner.

14. Now, in which direction P is standing with respect to R, Q and S ?

- (1) To the north of R and S
- (2) To the north – west of R and S
- (3) To the south of R and Q
- (4) To the south – east of Q and S

15. If the length of the park L = 250 mts. find the total distance covered together by P, R, Q and S.

- (1) 250 mts. (2) 375 mts.
- (3) 500 mts. (4) 750 mts.

16. Choose and substitute the correct set of signs in place of (*) sequentially, selecting from the given alternatives to make the equations meaningful.

$$45 * 15 * 5 * 35 * 25 * 25$$

- (1) -, ÷, ×, =, + (2) =, ÷, +, -, ×
- (3) ÷, ×, +, -, = (4) ÷, +, ×, -, =

17. When interchange of ÷ and -; 4 and 2 are made, find which of the following equations would be correct.

- (1) $(16 - 2) \times 3 = 11$ (2) $(32 - 2) \div 4 = 6$
- (3) $(10 \div 4) + 5 = 12$ (4) $(30 \div 4) - 2 = 9$

Directions (Q.18 & Q.19): In the questions below the numbers in the figures are related. Identify their relationship and find the missing numbers in the given figures.

18. (1) 8 (2) 6 (3) 3 (4) 2

19. (1) 65 (2) 55 (3) 50 (4) 48

20. A newspaper has 8 sheets consisting in 32 pages in total and 4 pages in each sheets with all the pages printed. If page number 25 is not present in that newspaper, find the set of missing pages from the choices given below.

- (1) 7, 8, 25, 26 (2) 3, 4, 25, 22
- (3) 9, 10, 25, 24 (4) 12, 13, 25, 22

Directions (Q.21 & Q.22): Find the correct mirror images for the following problem figures choosing from the alternatives.

21. Problem Figures :

(1) (2) (3) (4)

22. Problem Figures :

(1) (2) (3) (4)

Directions (Q.23 & Q.24): Find the missing number in the given matrices.

23.

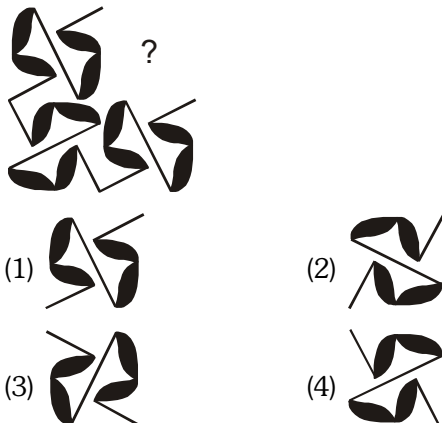
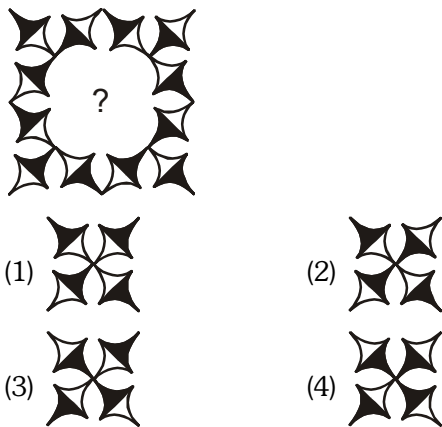
7	9	6
3	8	?
8	3	5

168	216	900	
(1) 10	(2) 15	(3) 30	(4) 45
24.

163	16	115
215	19	158
276	23	?

(1) 207	(2) 216
(3) 237	(4) 246

Directions (Q.25 & Q.26): Find the missing part of the given figure from the alternatives.

25. 
26. 

Directions (Q.27 to Q.31): Complete the given analogy by selecting the correct answers from the alternatives.

27. $16 : 105 :: 14 : ?$
 (1) 91 (2) 85
 (3) 77 (4) 69
28. $343 : 441 :: ? : 225$
 (1) 64 (2) 125
 (3) 216 (4) 512

29.

H	G
E	F

 :

19	20
22	21

 ::

?	?
?	?

 :

8	9
11	10

- (1)

P	Q
S	R

 (2)





D	E
A	B
- (3)

S	R
P	Q

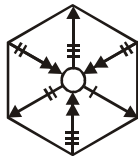
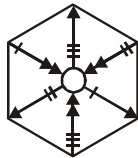
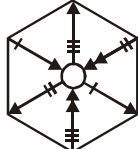
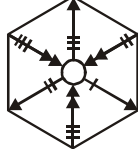
 (4)

I	J
K	L

30.  :: ?

- (1)  (2) 
- (3)  (4) 

31.  :: ?

- (1)  (2) 
- (3)  (4) 

Directions (Q.32 & Q.33): In a degree examination 75 students have appeared from a college for subjects physics, chemistry and mathematics. Among them,

- (1) 12 students have passed in all subjects.
 (2) 21 in physics only, 15 in chemistry only, 9 in mathematics only have passed.
 (3) Equal number of students have passed in any of the two subjects only.
32. Find the total number of students who have passed in mathematics.
 (1) 12 (2) 15 (3) 21 (4) 33
33. What is the difference in the number of students who have passed in physics and chemistry?
 (1) 8 (2) 7 (3) 6 (4) 5

34. Question below has three statements I, II and III. Decide whether the data in the statements is sufficient to find the answer to the given question: Five children P, Q, R, S and T are sitting in a row.

Statements :

- I. S is sitting next to the right of P.
 - II. Q is sitting next to R.
 - III. R is sitting to the extreme left.
- Question : To find who is sitting next to Q,

- (1) Data in statement I is sufficient.
- (2) Data in statement II is sufficient.
- (3) Data in all the statements I, II and III are sufficient.
- (4) Data in all the statements I, II and III are not sufficient.

Directions (Q.35 to Q.37): Find the wrong number /letters/ figure in the given series.

35. 9, 33, 73, 127, 201, 289
 (1) 201 (2) 127 (3) 73 (4) 33
36. ACZX, BDYW, CEXV, DFVT, EHWU
 (1) B D Y W (2) C E X V
 (3) E H W U (4) A C Z X

37.

(1) D (2) C (3) F (4) E

Directions (Q.38 & Q.39): Different faces of a cube are shown. Among the alternatives given identify which one of the figures represent the unfolded cube.

38.

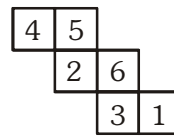
(1)

(2)

(3)

(4)

39. When the given problem figure is folded as a cube, identify which one of the cubes with faces shown below is NOT possible?



(1)

(2)

(3)

(4)

Directions (Q.40 & Q.41): Take the given statements as true and decide which of the conclusions logically follow from the statements.

40. Statements :

- (1) All umbrellas are aeroplanes.
- (2) Some birds are aeroplanes.

Conclusions :

- I. All umbrellas are birds.
 - II. All aeroplanes are umbrellas.
- (1) Only conclusion I follows.
 - (2) Only conclusion II follows.
 - (3) Both conclusion I and II follow.
 - (4) Neither conclusion I nor II follows.

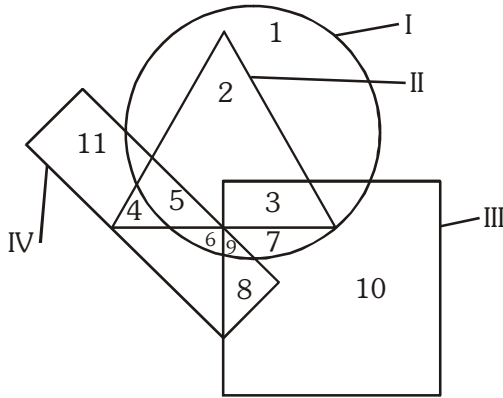
41. Statements :

- (1) Some teachers are students.
- (2) All students are women.

Conclusions :

- I All teachers are women.
 - II Some women are students.
 - III Some women are teachers.
 - IV All students are teachers.
- (1) Only conclusion I follows.
 - (2) Conclusions I, II and III follow.
 - (3) Conclusions II and III follow.
 - (4) Conclusions I, III and IV follow.

Directions (Q.42 & Q.43): The following questions are based on the given intersecting figures.



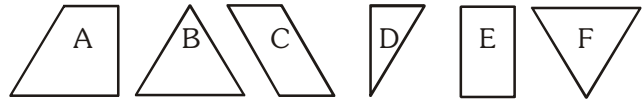
- 42.** Which pair of numbers given below are inside any Two figures only ?
 (1) 4, 8 (2) 1, 11 (3) 3, 10 (4) 5, 9
- 43.** Which one of the following statements is correct ?
 (1) Number 9 is in figures I, II, III
 (2) Number 7 is in figures II, III, IV
 (3) Number 6 is in figures I, III, IV
 (4) Number 5 is in figures I, II, IV

Directions (Q.44 to Q.46): In column-I words are given. Their codes are given in small letters under column-II without following the same order as in column-I. The codes for each word are jumbled within and among the columns. Find the codes for the letters of words in column-I and find the codes for given words in the questions.

Column-I Words	Column-II Codes
P O T	c e k
M A P	i w a
B U T	k x i
D A M P	b c e p
R E A M	c e s k
O C C U P Y	x i i e x a
B O T T O M	k w x n n q

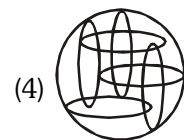
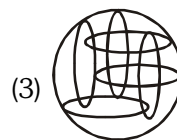
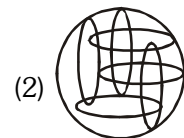
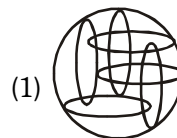
- 44.** BOAT
 (1) b a c i (2) a x c i (3) x c a k (4) c a b k
- 45.** CANDY
 (1) q c f n i (2) c n r q s
 (3) n c z s q (4) b x t w n
- 46.** PRUDENT
 (1) k p w s b z i (2) e i x k a f c
 (3) w k x q i r b (4) k n a b e t q

- 47.** A parallelogram is given below. Among the choices given, identify which set of parts of figure is required to form the parallelogram.



- (1) A, B, C, E (2) A, F, E, D
 (3) A, D, C, E (4) A, D, B, F
- 48.** Anil is one-third of his father's age. After 5 years his father will be two and half times of Anil's age. Find the present age of Anil's father.
 (1) 60 years (2) 45 years
 (3) 42 years (4) 36 years
- 49.** In the following questions two figures are given as problem figures. Find which of the following alternative figures would be formed, if the first figure is superimposed on the second figure.

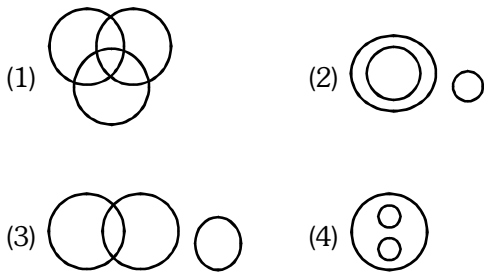
Problem Figures :



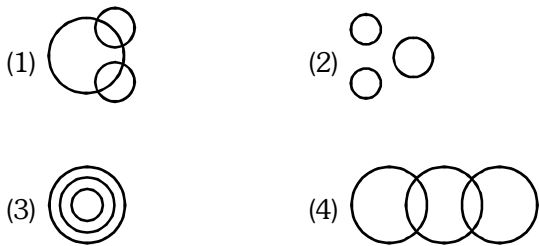
- 50.** One evening you will go to market with your friend. There you will notice a person looking suspicious and acting in a strange manner. At this situation what might your appropriate decision ?
 (1) You will just alert your friend.
 (2) You will leave the market and come out.
 (3) You will call the police immediately.
 (4) You will neglect that person.

Directions(Q.51 to Q.53): Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

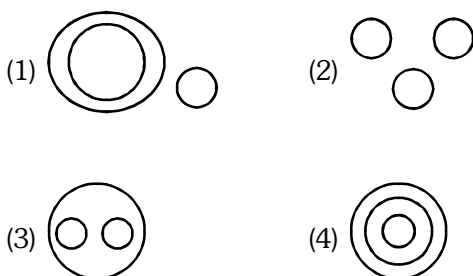
51. A, CD, GHI, ?, UVWXY
 (1) KLMN (2) LMNO
 (3) MNOP (4) NOPQ
52. ADVENTURE, DVENTURE, DVENTUR, ?, VENTU
 (1) VENTUR (2) VENTURE
 (3) DVENT (4) DVENTU
53. UPI, ?, ODP, MBQ, IAW
 (1) SIJ (2) SHJ (3) RHJ (4) TIJ
54. Which of the following diagrams indicates the relation between Judge, Thieves and Criminals ?



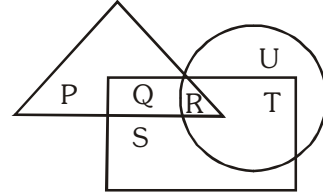
55. Which of the following diagrams indicates the relation between Iron, Lead and Nitrogen?



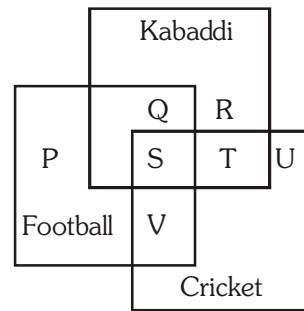
56. Which of the following diagrams indicates the relation between Bulb, Lamp and light ?



57. In the following figure triangle represents 'girls', square represents 'players' and circle represents 'coach'. Which part of the diagram represents the girls who are players but not coach ?



- (1) P (2) Q (3) R (4) S
58. The diagram given below represents those students who play Cricket, Football and Kabaddi. Study the diagram and identify the students who play all three games.



- (1) P + Q + R (2) V + T
 (3) S + T + V (4) S

Directions(Q.59 to Q.62): P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

- P is second to the right of T who is the neighbour of R and V.
- S is not the neighbour of P.
- V is the neighbour of U.
- Q is not between S and W, and W is not between U and S.

Answer the questions from the above sitting arrangement.

59. Who two of the following are not neighbours ?
 (1) RV (2) UV
 (3) RP (4) QW
60. Who is immediate right to the V ?
 (1) P (2) U (3) R (4) T

61. Which of the following is correct ?
 (1) P is to the immediate right of Q
 (2) R is between U and V
 (3) Q is to the immediate left of W
 (4) U is between W and S
62. What is the position of S ?
 (1) Between U and V
 (2) Second to the right of P
 (3) To the immediate right of W
 (4) Data inadequate

Directions(Q.63 to Q.66): Five girls are sitting on a bench to be photographed Seema is to the left of Rani and to the right of Bindu, Mary is to the right of Rani. Reeta is between Rani and Mary. Answer the questions from the above sitting arrangement.

63. Who is sitting immediate right to Reeta ?
 (1) Bindu (2) Rani
 (3) Mary (4) Seema
64. Who is in the middle of the photograph ?
 (1) Bindu (2) Rani
 (3) Reeta (4) Seema
65. Who is second from the right in the photograph ?
 (1) Mary (2) Rani
 (3) Reeta (4) Bindu
66. Who is second from the left in photograph ?
 (1) Reeta (2) Mary
 (3) Bindu (4) Seema

Directions(Q.67 to Q.69): Choose the word which is different from the rest.

67. (1) Producer (2) Director
 (3) Investor (4) Financer
68. (1) Calendar (2) Year
 (3) Day (4) Month
69. (1) Mumbai (2) Cochin
 (3) Kandla (4) Mysore
70. If $A + B$ means A is the father of B; $A - B$ means A is the brother B; $A \% B$ means A is the wife of B and $A \times B$ means A is the mother of B, which of the following shows that M is the maternal grandmother of T ?
 (1) $M \times N \% S + T$ (2) $M \times N - S \% T$
 (3) $M \times S - N \% T$ (4) $M \times N \times S \% T$

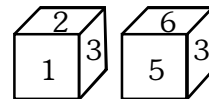
71. 1. B5D means B is the father of D.
 2. B9D means B is the sister of D.
 3. B4D means B is the brother of D.
 4. B3D means B is the wife of D.

Which of the following means F is the mother of K?

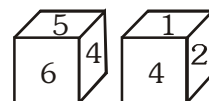
- (1) F3M5K (2) F5M3K
 (3) F9M4N3K (4) F3M5N3K
72. If POND is coded RSTL how is HEAR written in the code ?
 (1) GHIJ (2) JIGZ
 (3) GHIZ (4) None of these
73. If SPIDER is coded as PSDIRE, how is COMMON written in that code ?
 (1) OCMMNO (2) OCMMOO
 (3) OCMOON (4) OCMOMN

Directions(Q.74 to Q.76): All the six members of a family A, B, C, D, E & F are staying together. B is the son of C but C is not the mother of B. A & C are married couple. E is the brother of C. D is the daughter of A. F is the brother of B.

74. How many male members are there in the family ?
 (1) 1 (2) 2 (3) 3 (4) 4
75. Who is the mother of B ?
 (1) D (2) F (3) A (4) E
76. How many children does A have ?
 (1) 1 (2) 3 (3) 2 (4) 4
77. Which digit will appear on the face opposite to the face with number 3 ?

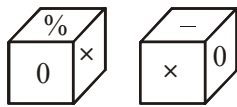


- (1) 4 (2) 5 (3) 6 (4) 2
78. Which number is on the face opposite to 6 ?



- (1) 4 (2) 1 (3) 2 (4) 3

79. Which sign will be opposite to '+' ?

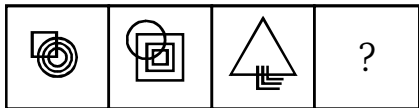


- (1) % (2) - (3) x (4) \$

Directions(Q.80 to Q.87): Find out the alternative which will replace the question mark.

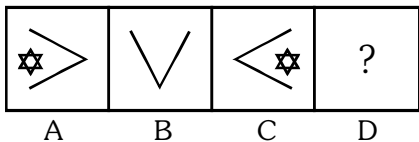
80. AZBY : CXDW :: EVFU : ?
 (1) GTHS (2) GHTS (3) GSTH (4) TGSB
81. ZRYQ : KCJB :: PWOV : ?
 (1) GBHA (2) ISJT (3) ELDK (4) EOFP
82. Computer : fpxrvht :: Language : ?
 (1) oxpidxg (2) ocqicyig
 (3) ocqixcig (4) ocqixcig
83. ACEG : ? :: BDFH : KMOQ
 (1) NLPR (2) LMNO
 (3) JLNP (4) JNLO
84. $M \times N : 13 \times 14 :: F \times R : ?$
 (1) 14×15 (2) 5×17
 (3) 6×18 (4) 7×19
85. Conference : Chairman :: Newspaper : ?
 (1) Reporter (2) Distributor
 (3) Printer (4) Editor

86. Problem figures



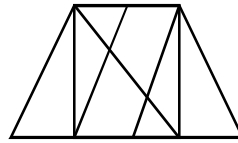
- (1) (2)
- (3) (4)

87. Problem Figures



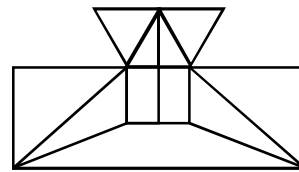
- (1) (2) (3) (4)

88. Find the number of triangle in the figure below.
 Problem figure



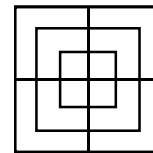
- (1) 8 (2) 10 (3) 12 (4) 14

89. Find the minimum number of straight lines required to make the given figure.



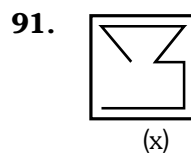
- (1) 16 (2) 17 (3) 18 (4) 19

90. Count the number of squares in the given figure.

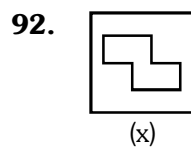


- (1) 8 (2) 12 (3) 15 (4) 18

Direction (Q.91 & Q.92) : Find out the alternative figure which contains figure (x) as its part.

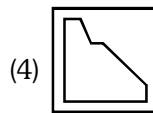
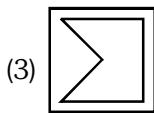
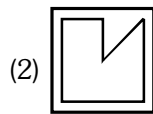
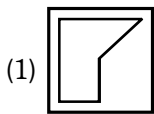
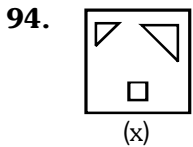
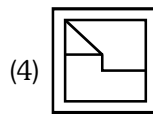
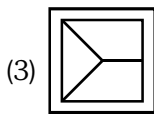
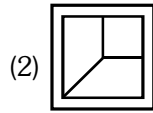
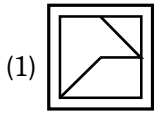
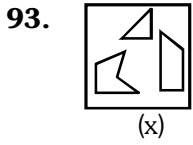


- (1) (2) (3) (4)

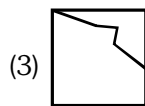
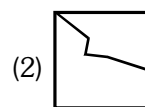
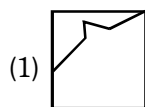
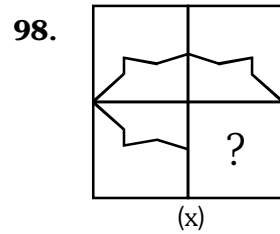
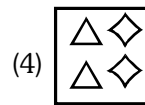
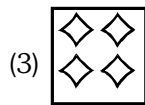
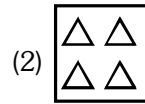
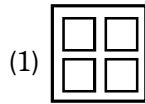
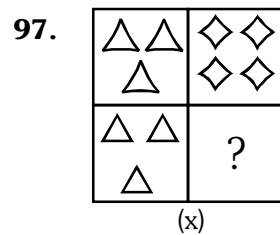
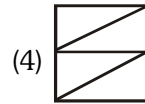
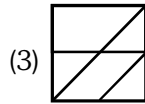
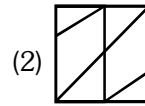
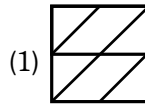
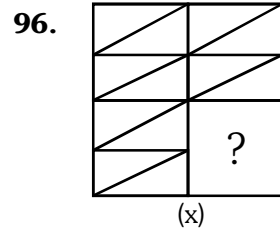
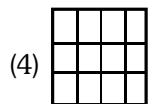
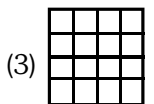
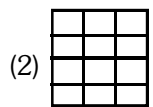
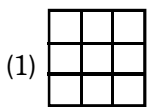
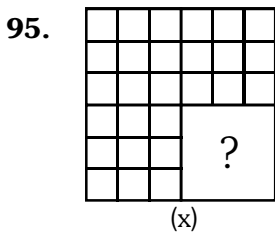


- (1) (2) (3) (4)

Directions(Q.93 & Q.94): Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (x).



Directions(Q.95 to Q.98): Identify the figure that completes the pattern (x).



Directions(Q.99 & Q.100): In these series, there are both letter pattern and number pattern. Fill the blank in series.

99. $ZA_5, Y_4B, XC_6, W_3D, ?$

- (1) E_7V (2) V_2E (3) VE_5 (4) VE_7

100. $DEF, DEF_2, DE_2F_2, DE_2F_2, ?, D_2E_2F_3$

- (1) DEF_3 (2) D_3EF_3 (3) D_2E_3F (4) $D_2E_2F_2$

SPACE FOR ROUGH WORK